ozga 09/446,379 Page 1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> fil hcaplu
FILE 'HCAPLUS' ENTERED AT 13:45:54 ON 20 MAR 2002
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FILE COVERS 1907 - 20 Mar 2002 VOL 136 ISS 12 FILE LAST UPDATED: 18 Mar 2002 (20020318/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

=> d ibib abs hitrn 17 1-10

L7 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:187305 HCAPLUS

TITLE: Preparation of O-hexanoyl heparin
oligosaccharides

AUTHOR(S): Butler, Melissa N.; Islam, Tasneem; Linhardt, Robert
CORPORATE SOURCE: Department of Chemistry, Loras College, Dubuque, IA,

52001, USA

SOURCE:

Abstracts of Papers, 223rd ACS National Meeting, Orlando, FL, United States, April 7-11, 2002 (2002), CHED-674. American Chemical Society: Washington, D.

٠.

CODEN: 69CKQP

DOCUMENT TYPE:

Conference; Meeting Abstract

LANGUAGE: English

AB Heparin has many clin. applications and has been used as an anticoagulant since 1939. Previous research suggests that the hexanoyl deriv. of heparin fragments may help to prevent scarring. For this research, O-hexanoyl heparin oligosaccharides were prepd. to assist research being done on scarless wound healing. First, the periodate-oxidized heparin fragments were prepd., and polyacrylamide gel electrophoresis was used for verification. Then the tributylammonium salt of the periodate-oxidized heparin fragments was prepd. Finally, the o-hexanoyl deriv. of the periodate-oxidized heparin fragments was prepd. Proton NMR was used to det. that the desired product was prepd. This product will be tested on pigs to see if it does in fact help to prevent scarring.

L7 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:809084 HCAPLUS

DOCUMENT NUMBER:

135:348912

TITLE:

Pectic substance as a growth factor stabilizer

INVENTOR(S):

Ni, Yawei; Yates, Kenneth M.

PATENT ASSIGNEE(S):

Carrington Laboratories, Inc., USA

SOURCE:

PRIO

U.S., 18 pp., Cont.-in-part of U.S. 5,929,051.

CODEN: USXXAM

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PAT		NO.	•	KII		DATE						ION N		DATE			
US						2001	1106							1998	0724		•
US	5929	051		Α		1999	0727		Ţ	JS 1	998-	78204		1998	0513		
										NO 1	999-	us111	.33	1999	0520		
	W:	AE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	, BG	, BR	, BY,	CA	CH,	CN,	CU,	CZ,
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	, GH	, GM	, HR,	HU	ID,	IL,	IN.	IS.
		-	-	-				-	-		•			LV,	•	•	•
														SI,			
		-	-	-			-	•			•		•	BY,		•	
			ТJ,		•	•	•	•			•			,	,		,
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ	, UG	, ZW	, АТ,	BE	CH,	CY,	DE.	DK.
														BF,			
						GW,								,	,	,	,
		•	•	•		•	•	•			•	•		1999	0520		
ΕP	1100	820		A.	1	2001	0523		. I	ΞP 1	999-	92324	6	1999	0520		
						IT,							-				
US			•	•	•	•			τ	JS 1	999-	32592	:3	1999	0604		
														1998			
														1998			

WO 1999-US11133 W 19990520

Pectic substance from Aloe vera and other sources is used as a stabilizer AB and a delivery vehicle for pectin/heparin-binding proteins, such as pectin/heparin binding growth factors. Aloe pectin, a naturally occurring LM (low methoxyl) pectin, binds to pectin/ heparin-binding growth factors, i.e., bFGF, aFGF, and KGF of fibroblast growth factor (FGF) family and TGF-.beta.1 of transforming growth factor-.beta. (TGF-.beta.) family. Com. LM or HM (high methoxyl) citrus pectins tested did not exhibit any binding activity with bFGF. A weak binding to bFGF was obsd. with a de-esterified pectin (polygalacturonic acid) prepd. from citrus. The binding protected the growth factor from protease digestion. The calcium gel beads prepd. with Aloe pectin also bound to these pectin/heparin-binding growth factors. The growth factor could also be encapsulated in the pectin calcium gel and Aloe pectin sodium gel. Pectin/heparin-binding growth factor stabilized by pectin is used for wound healing. A pectin-contg. matrix is used for the isolation of a pectin/heparin -binding protein. For example, a pharmaceutical formulation of a pectin/ heparin-binding growth factor can be made by mixing and blending the following ingredients: (i) a pectic substance 0.001-40 mg/mL, (ii) a pectin/heparin-binding growth factor (PHBGF) 0.1-100,000 ng/mL, (iii) a thickener, selected from hydroxyethyl cellulose, Karaya gum, a cationic polyacrylamide compd., and a sodium CM-cellulose 20-150 mg/mL, optionally a preservative and a dispersant, and (iv) the remaining is water, saline or a buffer soln.

IT 106096-92-8P, Acidic fibroblast growth factor 106096-93-9P

, Basic fibroblast growth factor

RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(pectic substances for stabilization of heparin-binding proteins and growth factors)

REFERENCE COUNT:

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2002 ACS

30

ACCESSION NUMBER:

2001:380339 HCAPLUS

DOCUMENT NUMBER:

134:371845

TITLE:

In situ crosslinking of proteins for wound

sealant

INVENTOR(S):

Miller, Douglas R.; Tizard, Ian R.; Keeton, Jimmy T.;

Prochaska, Jerry F.

PATENT ASSIGNEE(S):

The Texas A + M University System, USA

SOURCE:

PCT Int. Appl., 61 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 2001035882 A1 20010525 WO 2000-US31450 20001115

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

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CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
               IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
               MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
          MD, MG, MK, MN, MW, MX, NO, NZ, PL, PI, RO, RO, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                                US 1999-165567P P 19991115
                                                US 1999-166024P P 19991117
      This invention relates to materials and methods for in situ crosslinking
AB
      of proteins, including collagen, with peroxidase, including horseradish
      peroxidase, and H2O2 to form biocompatible semi-solid gels useful in a no.
      of biol. and food product applications. The mixt. applied to the
      wound sealing further comprises at least one addnl. agent selected
      from the group consisting of proteins, vaccine antigens, adjuvants, growth
      factors, microbeads and drugs, such as antimicrobials. The protein addnl.
      agent is selected from the group consisting of bovine serum albumin,
      fibrinogen, fibronectin, fibroblast growth factor, and human placental
      hyaluronic acid. A method of forming a semisolid crosslinked polymer on
      the surface of meat or poultry tissues for use as a food
      binding/restructuring agent comprises the steps of crosslinking a protein
      with a peroxidase in the presence of peroxide. Also, a method for growing
      dermal fibroblasts in vitro comprises the steps of growing the fibroblasts
      in a peroxide crosslinked collagen polymer.
      106096-93-9, Basic fibroblast growth factor
IT
      RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
          (peroxidase and H2O2 for in situ crosslinking of proteins including
         collagen for tissue sealant)
                                     THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                                     RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
      ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2002 ACS
L7
ACCESSION NUMBER:
                              2000:861512 HCAPLUS
DOCUMENT NUMBER:
                              134:32938
                              Keratinocyte Growth Factor-2 formulations
TITLE:
                              Gentz, Reiner L.; Chopra, Arvind; Kaushal, Parveen;
INVENTOR(S):
                              Spitznagel, Thomas; Unsworth, Edward; Khan, Fazal
                              Human Genome Sciences, Inc., USA
PATENT ASSIGNEE(S):
                              PCT Int. Appl., 103 pp.
SOURCE:
                              CODEN: PIXXD2
DOCUMENT TYPE:
                              Patent
                              English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO.
                                                   APPLICATION NO. DATE
                          KIND DATE
                                                   WO 2000-US15186 20000602
      WO 2000072872
                           A1
                                 20001207
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
               CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
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ozga ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 1999-137448P P 19990602 US 1999-160913P P 19991022 PRIORITY APPLN. INFO.: The invention is directed to liq. and lyophilized forms of Keratinocyte AΒ Growth Factor-2 (KGF-2) and derivs. thereof. This invention further relates to the formulations of KGF-2 for therapeutic use, for example, to promote or accelerate wound healing. 9005-49-6, Heparin, biological studies RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); (keratinocyte growth factor-2 formulations for promotion of wound healing) REFERENCE COUNT: THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2002 ACS 2000:271858 HCAPLUS ACCESSION NUMBER: 132:313737 DOCUMENT NUMBER: Preparation of supplemented and unsupplemented tissue TITLE: sealants MacPhee, Martin James; Drohan, William Nash; INVENTOR(S): Woolverton, Christoper J. The American National Red Cross, USA PATENT ASSIGNEE(S): SOURCE: U.S., 79 pp., Cont.-in-part of U.S. Ser. No. 351,006, abandoned. CODEN: USXXAM DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: סמידאיי או KIND DATE APPLICATION NO. שתעת

	PAT	ENT I	NO.		KII	שוא	DATE			Al	PL1	CATI	ON NO	o. 	DATE				
	US	6054	122		Α		2000	0425		បុន	3 19	95-4	7903	4	1995	0607			
	ΕP	1142	581		A.	2	2001	1010		EI	20	01-1	1365	1	1991	1127			
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE			
	CA	22238	889		A	4	1996	1219		C.	A 19	96-2	2238	89	1996	0607			
	WO	9640	174		A.	l	1996	1219		W	19	96-U	S100	06	1996	0607			
		W:	ΑU,	CA,	JΡ														
		RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE
	ΑU	9661	698		A.	1	1996	1230		Α	J 19	96-6	1698		1996	0607			
	ΕP	86980	04		A.	1	1998	1014		E	2 19	96-9	1934	0	1996	0607			
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	FI															
		1150					1999	0629		JI	2 19	96-5	0214	7	1996	0607			
	AU	9884	192		A.	1	1998	1105		Α	J 19	98-8	4192		1998	0911			
	ΑU	7334	71		B	2	2001	0517											
PRIO	RITY	APPI	LN. :	INFO.	. :				1	US 19	990-	6184	19	B2	1990	1127			
									1	US 19	91-	7989	19	В2	1991	1127			
									1	US 19	993-	3116	4	B1	1993	0312			

B2 19941025 US 1994-328552 US 1994-351006 B2 19941207 EP 1992-901268 A3 19911127 AU 1994-63648 A3 19940314 US 1995-474078 A 19950607 Α US 1995-479034 19950607 WO 1996-US10006 W 19960607

A fibrin sealant dressing may be supplemented with at least 1 AB compn. selected from, e.g., 1 or more regulatory compds., antibody, antimicrobial compns., analgesics, anticoagulants, antiproliferatives, anti-inflammatory compds., cytokines, cytotoxins, drugs, growth factors, interferons, hormones, lipids, demineralized bone or bone morphogenetic proteins, cartilage inducing factors, oligonucleotides polymers, polysaccharides, polypeptides, protease inhibitors, vasoconstrictors or vasodilators, vitamins, minerals, stabilizers and the like. Also disclosed are methods of prepg. and/or using the unsupplemented or supplemented fibrin sealant dressing. An 800-mL culture of recombinant E. coli contg. a plasmid that included DNA encoding HBGF-1.beta. was prepd. After induction and culturing for 24 h at 37.degree. the cells were centrifuged and the supernatant was discarded. He cell pellet was resuspended in 25 mls of 20 mM phosphate buffer, contg. pH 7.3 0.15M NaCl. The suspended cells were disrupted with a cell disrupter and the cell debris was sepd. from the resulting soln. by centrifugation at 5000 G for 20 min. The pellet was discarded and the supernatant contg. the solubilized HBGF-1.beta. and other bacterial proteins was loaded onto column of heparin-Sepharose. Three peaks of UV absorbing material eluted and were analyzed by SDS polyacrylamide gel electrophoresis. 'Peak no. 3 was subjected to electrophoresis as a single band at about 17,400 daltons and contained substantially pure HBGF-1.beta.. Peak no. 3 which contained the growth factor activity, was dialyzed overnight against 20 mM histidine and pH 7.5 0.15M NaCl. This purified HBGF-1 was used to supplement FG in subsequent examples.

ΤT 106096-92-8 106096-93-9, Fibroblast growth factor-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of supplemented and unsupplemented tissue sealants)

REFERENCE COUNT: 225 THERE ARE 225 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2002 ACS L7

ACCESSION NUMBER:

1999:425765 HCAPLUS

DOCUMENT NUMBER:

131:78442

TITLE:

Keratinocyte growth factor-2 formulations for

promotion of wound healing

INVENTOR(S):

Gentz, Reiner L.; Chopra, Arvind; Kaushal, Parveen; Spitznagel, Thomas; Unsworth, Edward; Khan, Fazal

Human Genome Sciences, Inc., USA

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 88 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

ozga

WO 9925395

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PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
     WO 9932135 A1 19990701
                                          WO 1998-US26085 19981222
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
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             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
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             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                     A1 19990712
                                     AU 1999-19057
EP 1998-963812
     AU 9919057
                                                            19981222
     EP 1041996
                      A1 20001011
                                                            19981222
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     US 6238888
                            20010529
                                           US 1998-218444
                       В1
                                                            19981222
                       T2
                                           JP 2000-525126
     JP 2001526239
                            20011218
                                                           19981222
     US 2002016295
                            20020207
                                           US 2001-853666 20010514
                       A1
PRIORITY APPLN. INFO.:
                                        US 1997-68493P P 19971222
                                        US 1998-218444
                                                        Al 19981222
                                        WO 1998-US26085 W 19981222
     The invention is directed to liq. and lyophilized forms of Keratinocyte
AB
     Growth Factor-2 (KGF-2) and derivs. thereof. This invention further
     relates to the formulation of KGF-2 for therapeutic use, for example, to
     promote or accelerate wound healing.
     9005-49-6, Heparin, biological studies
TΥ
     RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical
     process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (gelling agent; keratinocyte growth factor-2 formulations for promotion
        of wound healing)
                               THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1999:350613 HCAPLUS
DOCUMENT NUMBER:
                         130:357215
TITLE:
                         Improved wound dressing device and
                         methods
INVENTOR(S):
                         Gibbins, Bruce L.
PATENT ASSIGNEE(S):
                         USA
SOURCE:
                         PCT Int. Appl., 32 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
    WO 9925395
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A2	19990527	WO 1998-US24272	19981113
A3	19990812		

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W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      AU 9916991
                          A1 19990607
                                                 AU 1999-16991
                                                                        19981113
                           A2
      EP 1030695
                                 20000830
                                                   EP 1998-961733
                                                                        19981113
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, FI
                                                US 1997-971074 A2 19971114
PRIORITY APPLN. INFO .:
                                                WO 1998-US24272 W 19981113
      The present invention comprises methods and compns. for treating
AB
      wounds. More particularly, the present invention comprises
      methods and compns. for wound dressing devices
      comprising a matrix comprising a polymer network and a non-gellable
      polysaccharide having active agents, such as wound healing
      agents, incorporated therein. The matrix may be formed into any desired
      shape for treatment of wounds. A mixing tank was charged with
      161.4 kg water and 9.1894 kg acrylamide, and 0.10347 kg of
      methylenebisacrylamide and 9.3046 kg glycerol were added and mixed. Then,
      1.0213 kg guar gum was dispersed in a mixt. contg. 0.9770 kg isopropanol
      and 2 kg water. The soln. of guar gum was dispersed into the acrylamide
     mixt. After suitable mixing, 0.1042 kg TEMED was added and polymn. was
      catalyzed with 0.0999 kg ammonium persulfate. While the batch was still
      liq., it was poured into molds to form sheets. After gelling had
      occurred, sheets were transferred to a desiccator and dehydrated to form a
      stable sheet.
     106096-92-8, Acidic fibroblast growth factor 106096-93-9
TΤ
      , Basic fibroblast growth factor
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
          (wound dressings contg. polymer network and
         polysaccharides and active agents)
     ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2002 ACS
L7
ACCESSION NUMBER:
                             1993:644381 HCAPLUS
DOCUMENT NUMBER:
                             119:244381
TITLE:
                             Immobilization of chemical species in crosslinked
                             matrices by crosslinking via latent reactive groups
INVENTOR(S):
                             Swan, Dale Gustaf; Josephson, Mark William; Swanson,
                             Melvin John
PATENT ASSIGNEE(S):
                             Bio-Metric Systems, Inc., USA
                             PCT Int. Appl., 42 pp.
SOURCE:
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                 DATE
                                                  APPLICATION NO.
                                                                       DATE
     -----
                         ____
                                                   -----
     WO 9316176
                          Α1
                                 19930819
                                                  WO 1993-US1248
                                                                       19930211
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W: AU, CA, JP
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
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                            19930903
                                           AU 1993-36646
                                                             19930211
                       A1
                            19940309
                                           EP 1993-905897
                                                             19930211
     EP 585436
                       A1
                            20000503
     EP 585436
                       В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                            19940804
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                       Т2
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                       Т3
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                                                             19930211
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                                                             19970219
     AU 716543
                       B2
                            20000224
PRIORITY APPLN. INFO .:
                                        US 1992-835206
                                                         A 19920213
                                        WO 1993-US1248
                                                         A 19930211
                                        US 1994-193904
                                                         B1 19940209
     Chems., esp. pharmaceutically useful materials are immobilized in a
AB
     crosslinked three dimensional matrix by first forming the matrix and
     enclosing the immobilized material and then activating latent reactive
     groups in the matrix to immobilize the compd. of interest. The method is
     particularly useful for coating important surfaces of medical goods such
     as dressings or blood bags. The preferred form of activation is
     by photoactivation. Photoactivatable polyacrylamide (PhotoPAA)
     was prepd. by the reaction of polyacrylamide and benzoylbensoyl
     chloride in CHCl3. Heparin was immobilized on regenerated
     polysulfone hollow fiber dialysis membranes using adsorption,
     photoimmobilization, or by coimmobilization with PhotoPAA.
                                                                 After washing
     of the membranes, the membranes to which heparin had been
     adsorbed carried 2.4 Factor Xa inhibition milliunits/cm2.
     photoactivatable heparin this value was 5.8, and for the
     coimmobilized heparin it was 5.2. Further uses in cell culture
     and blood collection are demonstrated.
TT
     9005-49-6, Heparin, biological studies
     RL: PROC (Process)
        (immobilization of, in crosslinked matrix carrying photoactivatable
        reactive groups)
ΙT
     9005-49-6DP, Heparin, reaction products with
     N-(p-benzoyl)aminocapryloxysuccinimide
     RL: PREP (Preparation)
        (prepn. of, as photoactivatable heparin for immobilization)
     ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1990:11911 HCAPLUS
DOCUMENT NUMBER:
                         112:11911
                         Gel formulation containing polypeptide growth factors
TITLE:
INVENTOR(S):
                         Finkenaur, Amy L.; Cohen, Jonathan M.; Shalaby,
                         Shalaby W.; Sandoval, Elisabeth A.; Bezwada, Rao S.;
                         Kronenthal, Richard L.
PATENT ASSIGNEE(S):
                         Ethicon, Inc., USA
                         Eur. Pat. Appl., 16 pp.
SOURCE:
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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KIND DATE
                                          APPLICATION NO. DATE
     PATENT NO.
                                          EP 1988-308574
                                                           19880916
     EP 312208
                     A1
                           19890419
        R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE
                                         AU 1988-22235
                                                           19880914
                           19890323
     AU 8822235
                     A1
                                           JP 1988-232102
                                                           19880916
                      A2
                           19900105
     JP 02000112
                                          ZA 1988-6947
                                                           19880916
                           19900530
     ZA 8806947
                                       US 1987-98816
                                                        A 19870918
PRIORITY APPLN. INFO.:
                                       US 1988-233483
                                                       A 19880819
AB Gel formulations contain polypeptide growth factors having human mitogenic
     or angiogenic activity and water sol. polymers for providing viscosities
     within various ranges detd. by the application of the gels. These gel
     formulations are useful for topical or incisional wound healing
     fur cutaneous wounds, in the anterior chamber of the eye and
     other ophthalmic wound healing. These formulations provide
     controlled release and increased contact time of the growth factor to the
     wound site. Thus, 6.3 g methylparaben, 0.7 g propylparaben, and
     177.5 g mannitol was dissolved in 3500 mL water and to this soln. was
     added 17.5 g powd. poly(acrylic acid) (Carbopol 940) with mixing at 1000
     rpm. The soln. was neutralized with 10% NaOH and 900 g resultant gel was
     removed and autoclaved, followed by addn. of 12 mL sterile EGF (1.18
     mg/mL) to give a sterile gel (viscosity 490,000-520,000 cps) contg. 15.6
     .mu.g EGF/mL. This gel gave an enhanced rate and quality of sound healing
     in pig and guinea pig partial thickness skin excision models.
     9005-49-6, Heparin, biological studies
TΤ
     RL: BIOL (Biological study)
        (aq. gels contg. polypeptide growth factors and)
     106096-92-8, Acidic fibroblast growth factor 106096-93-9
IT
     , Basic fibroblast growth factor
     RL: BIOL (Biological study)
        (aq. gels contg. viscosity-enhancing polymers and, for healing of
        cutaneous and ophthalmic wounds)
     ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1981:71410 HCAPLUS
                         94:71410
DOCUMENT NUMBER:
                         Hemolytic properties of special materials exposed to a
TITLE:
                         shear flow, and plasma changes with shear
                         Monroe, Joseph M.; Lijana, Robert C.; Williams,
AUTHOR(S):
                         Michael C.
                         Chem. Eng. Dep., Univ. California, Berkeley, CA,
CORPORATE SOURCE:
                         94720, USA
                         Biomater., Med. Devices, Artif. Organs (1980), 8(2),
SOURCE:
                         103-44
                         CODEN: BMDOAI; ISSN: 0090-5488
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     Three types of materials were evaluated for their tendency to induce
     hemolysis when exposed to a laminar blood flow between rotating parallel
     disks: (1) TDMAC-heparinized surfaces of polycarbonate (Lexan)
```

[9003-05-8] hydrogels (PAH) prepd. by 3 different chem. processes; and (3) fluorinated ethylcellulose (FEC). All were compared to a polyethylene

silicone rubber, and poly(vinyl chloride); (2) polyacrylamide

(PE) std., to normalize data for variations in blood quality. Multiple tests, showing good reproducibility, demonstrated: FEC is a very low hemolyzer, about 60% of PE; the PAH surfaces are poorer than PE, giving 120-220% of PE hemolysis depending on fabrication and shipment history; and TDMAC-heparinized surfaces are highly hemolytic, in the range 160-440% of PE depending on substrate. Plastics used as substrates for the coatings cited above were also evaluated: Delrin, Lexan, Nylon 6, polypropylene, and a polyether urethane. Tentative explanations are advanced for hemolytic variations, in terms of surface chem. and material interactions with the blood.